

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN R. JACKSON
and MINGCHUAN ZHAO

Appeal 2007-1368
Application 10/601,602
Technology Center 1700

Decided: November 29, 2007

Before EDWARD C. KIMLIN, CHUNG K. PAK, and CATHERINE Q.
TIMM, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

Appellants request rehearing of our decision of April 30, 2007, wherein we sustained the Examiner's rejection of claims 8-17 under 35 U.S.C. § 112, first paragraph, enablement requirement, the rejection of claim 34 under 35 U.S.C. § 102(b), and the rejection of claim 35 under 35 U.S.C. § 103(a).

Upon careful consideration of the arguments raised by Appellants in their Request, we remain of the opinion that the Examiner properly rejected the appealed claims under 35 U.S.C. § 112, first paragraph, 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a).

Concerning the rejection of claims 8-17 under 35 U.S.C. § 112, first paragraph, we are not convinced by Appellants' arguments that the original Specification would have enabled one of ordinary skill in the art to practice the invention within the scope of claims 8-17 without undue experimentation. Although claim 8 does not recite a specific value for the alkali metal ion transport efficiency of the permselective polymer membrane, the present Specification, as noted in our decision, states that "permselective cell membranes having low alkali metal ion transport efficiency, generally, less than about 60% of theoretical, preferably, less than about 50% of theoretical, and, most preferably less than 20% of theoretical are used" (Spec. 13: 13-16). In addition, claim 10 recites an efficiency of less than about 50% whereas claim 11 recites an efficiency of less than 20%. Consequently, it cannot be gainsaid that appealed claims 8-17 embrace assemblies wherein permselective polymer membranes have alkali metal ion transport efficiencies less than about 60% as well as less than about 20%. As a result, Appellants' Declaration which identifies Nafion 551 as a commercially-available permselective membrane having a transport efficiency of 65%, is not probative that one of ordinary skill in the art would be able to practice the claimed invention utilizing membranes having a much lower ion transport efficiency.

The Declaration clearly states that modification of prior art membranes is necessary "to provide the required low alkali metal ion transport efficiency permselective polymer membrane component of the claimed assembly" (Decl., sentences bridging pages 2-3). Appellants' Specification provides no guidance to one of ordinary skill in the art regarding how to modify known membranes such that they have the low transport efficiencies encompassed by claims 8-17. Nor does Appellants' Declaration establish that this knowledge was within the prior art at the time of filing the present application. Indeed, all that can be gleaned from Appellants' Declaration is that Nafion 551 is a modified polymer that has low alkali metal ion transport efficiency as a result of the addition of Teflon fibers to the base perfluorosulfonic acid polymer for obtaining an ion transport efficiency of 65%. However, there is no evidence that one of ordinary skill in the art would have known how to modify such polymers to obtain an effective, operable membrane having a transport efficiency far below 65%. While we agree with Appellants' statement at page 8 of the Request, "[t]he first paragraph of 35 U.S.C. § 112 requires that the scope of the claims must bear only a reasonable correlation to the scope of enablement in said Specification to persons of ordinary skill in the art," we find that the scope of claims 8-17 is considerably broader than the level of enablement presented in Appellants' Specification.

As for the prior art rejection of claim 34, we adhere to our opinion that the claim recitation "for the continuous, cyclic production of an alkali metal halate" is a statement of intended use for the claimed assembly that

does not provide a structural distinction over the assembly described by Sawamoto. Appellants invite us to review *MPEP* § 2111.02(II) regarding the weight to be attributed to preambular language. We note, however, that the principles articulated in the *MPEP* and the court decisions cited by Appellants were given full consideration by this Board in our determination that the claimed statement of intended use does not distinguish the claimed assembly over the assembly described by Sawamoto. In particular, the *MPEP* states that in claims which define an apparatus the language in the preamble that limits the structure of the apparatus must be given weight. However, Appellants have presented no argument regarding how the claimed preambular language limits the claimed assembly comprising an electrolytic cell, a gas and liquid disengager for a catholyte stream, a gas and liquid disengager for an analytic stream, wherein the electrolytic cell comprises the recited polymer membrane separating either an anode and a cathode compartment, a catalytic metal anode and catalytic metal cathode, or a catalytic metal anode and a gas-diffusion cathode. Significantly, Appellants' Brief fails to point out any component of the claimed assembly that is not described by Sawamoto, and such failure persists in Appellants' Request for Rehearing. As stated in our decision, "Appellants have presented no argument, let alone evidence, that the electrolytic cell of Sawamoto, which comprises the components recited in claim 34, is not capable of continuous, cyclic production of an alkali metal halate" (Decision 6, first para.).

As for Appellants' citation of *Pitney Bowes v. Hewlett-Packard*, 182 F.3d 1298, 1305 (Fed. Cir. 1999), it is well settled that each case stands on its own particular set of facts. *Pitney Bowes* does not espouse any new principle regarding the weight to be attributed to preambular language but specifically found that "the language in the preamble of the claims strongly militates towards construing the claim term 'spots of different sizes' to refer to the spots of discharged area on the photoreceptor, not the light spots generated by the beam of light" (*id.* at 1305). Manifestly, the particular facts underlying *Pitney Bowes* are quite different than the facts of the present case, and Appellants have apprised us of no differences in the claimed assembly and the reference assembly other than the manner in which they are being used. Also, it is axiomatic that claims are construed more broadly during ex parte prosecution than during infringement proceedings, as in *Pitney Bowes*.

In conclusion, based on the foregoing, we have granted Appellants' request to the extent we have reconsidered our decision, but we decline to make any change therein. Accordingly, Appellants' request to reverse the Examiner's rejections is denied.

DENIED

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